

Shoji SATO  
Acting Project Manager, TAISEI CORPORATION, D. G. Khan

Test Performed By: Dr. /Engr. S Asad Ali Gillani

Client Reference: TC/OTH/GEN/03415  
SOM Lab Ref: CED/SOM/469(Page-1/1)

Dated: 16-03-2019  
Dated: 18-03-2019

Test: Tension Test & Bend Test  
Sample Type: Deformed Bar (Mughal Steel)

Test Specification: ASTM-A 615  
Gauge Length: 200 mm

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	kg/m	mm	mm	mm <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	4.929	25	28.28	491	628	313.20	413.00	638	499	841	658	35.0	200	17.5	
2	3.867	25	25.04	491	493	278.20	353.70	567	565	721	719	30.0	200	15.0	
3	2.964	22	21.93	380	378	243.20	289.70	640	645	762	768	27.5	200	13.8	
4	2.970	22	21.95	380	378	239.20	289.00	629	633	760	764	30.0	200	15.0	
5	1.586	16	16.04	201	202	108.50	139.20	540	537	692	689	30.0	200	15.0	
6	1.590	16	16.06	201	203	107.50	138.50	535	531	689	684	32.5	200	16.3	
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Witnessed By: Abdul Basit

**BEND TEST:**

25mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  <b>Only Nine Samples Received and Tested</b>
22mm	Sample bend through 180 degrees Satisfactorily without any crack	
16mm	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Imran Ahmed

Test Performed By: Dr. /Engr. Numan Khurram

Resident Engineer, Meinhardt (Pakistan) Pvt Ltd. (PepsiCo Intl. Multan Snacks Greenfield Plant)

Client Reference: MPPL/QC/0291

Dated: 14-03-2019

SOM Lab Ref: CED/SOM/475(Page-1/1)

Dated: 18-03-2019

Test: Tension & Bend Test

Test Specification: ASTM-A 615

Sample Type: Deformed Bar

Gauge Length: 200 mm

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	kg/m	mm	mm	mm <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	1.585	16	16.04	201	202	100.00	132.50	497	496	659	656	25.0	200	12.5	
2	1.602	16	16.12	201	204	101.50	139.50	505	498	694	684	17.5	200	8.8	
3	0.897	12	12.06	113	114	57.20	79.50	506	501	703	696	17.5	200	8.8	
4	0.897	12	12.06	113	114	58.00	80.20	513	508	709	702	20.0	200	10.0	
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**BEND TEST:**

16mm	Sample bend through 180 degrees Satisfactorily without any crack	<p><b>Note:-</b></p> <p><b>Only Six Samples Received and Tested</b></p>
12mm	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Sub Divisional Officer  
Buildings Sub Division, Kamoke

Test Performed By: Dr. /Engr. M Rizwan Riaz

Client Reference: 118/K

SOM Lab

Ref: 450 (Page-1/1)

Dated: 08-03-2019

Dated: 12-03-2019

Test: Tension Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.403	6	0.724	0.44	0.412	10.67	16.84	53500	57130	84410	90150	1.10	8.0	13.8	
2	1.482	6	0.745	0.44	0.436	12.91	19.88	64690	65280	99640	100550	1.40	8.0	17.5	
3	0.656	4	0.496	0.20	0.193	6.57	8.53	72510	75140	94090	97500	1.00	8.0	12.5	
4	0.653	4	0.494	0.20	0.192	6.49	8.58	71610	74590	94650	98590	0.90	8.0	11.3	
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**BEND TEST:**

--	No Bend test performed	<b>Note:- Only Four Samples Received and Tested</b>

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Engr. Tajammal Farooq  
Resident Engineer (AZE A), Sialkot (S F S)

Test Performed By: Dr. /Engr.

S Asad Ali  
Gillani

Client Reference: RE/SKT -46

Dated: 05-03-2019

Test: Tension Test & Bend Test

Test Specification:

SOM Lab

Ref: 468(Page-1/1)

Dated: 18-03-2019

ASTM-A-615

Deformed

Bar(PSM)

Gauge Length: 8 inch

Sample Type:

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.657	4	0.496	0.20	0.193	6.85	8.46	75540	78280	93300	96680	0.90	8.0	11.3	
2	0.655	4	0.494	0.20	0.192	6.01	7.34	66320	69090	80940	84310	1.00	8.0	12.5	
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**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  <b>Only Three Samples Received and Tested</b>

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Lt. Col M. Yousaf Javed (Rtd)  
Project Director, Integrated Medical Care, Lahore

Test Performed By: Dr. /Engr. Numan Khurram

Client Reference: IMC-MAK/03

SOM Lab

Ref: 470(Page-1/1)

Dated: 15-03-2019

Dated: 08-03-2019

Test: Tension Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.585	8	0.984	0.79	0.760	24.72	34.53	69010	71740	96390	100190	1.20	8.0	15.0	
2	2.593	8	0.985	0.79	0.762	24.54	34.00	68500	71020	94910	98400	1.30	8.0	16.3	
3	1.439	6	0.734	0.44	0.423	16.59	19.42	83130	86470	97340	101250	1.10	8.0	13.8	
4	1.431	6	0.732	0.44	0.421	16.46	19.85	82520	86240	99480	103970	1.10	8.0	13.8	
5	0.658	4	0.496	0.20	0.193	6.80	9.23	74980	77700	101730	105420	1.00	8.0	12.5	
6	0.653	4	0.494	0.20	0.192	6.85	9.33	75540	78690	102860	107140	1.10	8.0	13.8	
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**BEND TEST:**

--	No Bend test performed	<b>Note:- Only Six Samples Received and Tested</b>

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Abdul Ghafar  
Project Manager Liberty Builders, Lahore

Test Performed By: Dr. /Engr. S Asad Ali Gillani

Client Reference: CONC - 20190318

SOM Lab

Ref: 471(Page-1/1)

Dated: 18-03-2019

Dated: 18-03-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar( Model Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.712	8	1.007	0.79	0.797	25.66	34.15	71630	71000	95340	94500	1.30	8.0	16.3	
2	2.713	8	1.007	0.79	0.797	26.40	35.55	73710	73060	99230	98360	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Three Samples Received and Tested</b>

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Abdul Ghafar  
Project Manager Liberty Builders, Lahore

Test Performed By: Dr. /Engr. S Asad Ali Gillani

Client Reference: CONC - 20190318

SOM Lab

Ref: 471(Page-2/2)

Dated: 18-03-2019

Dated: 18-03-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar( Moiz Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.670	8	1.000	0.79	0.785	33.44	40.62	93340	93940	113410	114130	1.40	8.0	17.5	
2	2.665	8	0.998	0.79	0.783	36.19	42.71	101030	101930	119240	120310	1.10	8.0	13.8	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:- Only Three Samples Received and Tested</b>

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Engr Muhammad Saad

Test Performed By: Dr. /Engr. Bilal A. Khkohar

Assistant Engineer (Electrical), Al Hussain Traders Contractors, (Contract No. TLC- 03-2017)

Client Reference: AHT/TLC-03/1670-73

SOM Lab

Ref: 472(Page-1/1)

Dated: 17-03-2019

Dated: 18-03-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Fazal Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	3.300	9	1.111	1.00	0.970	36.60	46.08	80710	83210	101620	104760	1.00	8.0	12.5	
2	3.333	9	1.116	1.00	0.979	35.83	45.72	79030	80720	100830	102990	1.00	8.0	12.5	
3	2.569	8	0.980	0.79	0.755	27.52	35.75	76840	80400	99800	104430	1.40	8.0	17.5	
4	2.587	8	0.984	0.79	0.760	26.35	34.63	73570	76470	96670	100490	1.50	8.0	18.8	
5	2.024	7	0.870	0.60	0.595	21.38	27.03	78580	79240	99370	100210	1.00	8.0	12.5	
6	2.012	7	0.867	0.60	0.591	21.53	27.12	79140	80340	99670	101190	1.30	8.0	16.3	
7	1.472	6	0.743	0.44	0.433	15.57	19.24	78020	79290	96420	97980	1.00	8.0	12.5	
8	1.463	6	0.740	0.44	0.430	15.59	19.42	78130	79940	97340	99600	1.10	8.0	13.8	
9	0.668	4	0.500	0.20	0.196	6.07	9.58	66890	68250	105670	107820	1.20	8.0	15.0	
10	0.666	4	0.500	0.20	0.196	6.09	9.48	67110	68480	104540	106670	1.20	8.0	15.0	

Witnessed By: Sohaib Ali, NESPAK & M. Saad, Al-Hussain,

**BEND TEST:**

# 9	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:- Only Fourteen Samples Received and Tested</b>
# 8	Sample bend through 180 degrees Satisfactorily without any crack	
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)



Tayyab Jawaid

Test Performed By: Dr. /Engr.

S Asad Ali  
Gillani

M. H & Sons, (Over Head Water Tank. 1 x 100000 Lac Gallon, Tank No. 2, Okara Cantt)

Client Reference: nil

SOM Lab

Ref: 473(Page-1/1)

Dated: 18-03-2019

Dated: 18-03-2019

Test: Tension Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.468	8	0.961	0.79	0.725	29.15	35.44	81390	88690	98950	107820	1.30	8.0	16.3	
2	1.950	7	0.854	0.60	0.573	18.30	23.60	67260	70430	86740	90830	1.30	8.0	16.3	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  <b>Only Two Samples Received and Tested</b>

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)